REMARKS/ARGUMENTS

Claims 1-3 and 5-19 are pending following entry of the foregoing amendment. Claim 4 has been canceled. Claim 1 has been amended to more particularly point out that the fabric-receiving portion of the bar is oriented at an angle from the horizontal. Claim 6 has been similarly amended, and has been amended to correct the obvious omission of the word "of" in the second line. Support for the amendment is found at page 8, paragraph [0033], of the specification as filed. Claims 18 and 19 are newly added. No new matter has been added.

Entry of the amendments and allowance of claims 1-3 and 5-19 are requested in view of the following remarks.

Rejections under 35 U.S.C. § 102(b)

Claims 1-4, 6-8, 10, and 12-14 were rejected as anticipated by U.S. patent 774,641 (Barkhurst).

Claims 1 and 6, as amended, recite a shaped, elongated bar supported to orient the shaped portion of the bar at an angle from the horizontal. Barkhurst does not disclose an elongated bar that is supported to orient the shaped portion at an angle from the horizontal. Instead, the portion of the rod 4 of Barkhurst that receives the fabric lies entirely in a horizontal plane. This can be clearly seen in the curved rods 4, 4a in figures 2 and 4 of Barkhurst.

As shown in Fig. 9 of the present application, and as claimed, the portion of the elongated bar 22 that receives the fabric is at an angle from the horizontal. This feature enables the invention to minimize wrinkles in the hanging fabric and achieve a smooth surface.

Since Barkhurst lacks any teaching of this feature, claims 1 and 6, as amended, are novel and patentable over Barkhurst. Claims 2, 3, and 5 depend directly or indirectly from claim 1 and claims 7, 8, 10, and 12-14 depend directly or indirectly from claim 6. Apart from their own merits, claims 2, 3, 5, 7, 8, 10, and 12-14 are patentable as depending from a patentable claim. Withdrawal of the rejection of claims 1-3, 6-8, 10, and 12-14 based on Barkhurst and allowance of those claims is requested.

Claims 1, 5, 6, 9, 10, and 12-14 were rejected as anticipated by U.S. patent 2,506,160 (Martin, *et al.*). Martin, *et al.*, do not disclose an elongated bar for receipt of the flexible shade fabric of a roller shade. The rod 15 of Martin, *et al.*, is in fact a standard curtain rod for supporting a curtain or a valance in front of a window shade 17. There is no teaching or suggestion in Martin, *et al.*, of the shade fabric of a window shade 17 being supported over or suspended from the curtain rod 15.

Claims 1 and 6 both recite a bar to slidingly receive the flexible shade fabric, the bar having a non-linear shaped portion along its length. The bar is supported to orient the shaped portion at an angle from the horizontal. None of these features is found in Martin, *et al.* The Martin, *et al.*, patent shows only a standard curtain rod, which is linear and not shaped, and which is mounted horizontally. Most important, the linear, horizontally mounted standard curtain rod of Martin, *et al.*, does not receive the fabric of a window shade.

Because the Martin, *et al.*, patent lacks any teaching of a bar to slidingly receive the flexible shade fabric, with the bar having a non-linear shaped portion along its length and being supported to orient the shaped portion at an angle from the horizontal, claims 1 and 6 are novel and therefore patentable over Martin, *et al.* Claim 5, which depends from claim 1, and claims 9, 10, and 12-14, which depend directly or indirectly from claim 6, are patentable because they depend from a patentable claim, apart from their own merits. Withdrawal of the rejection of claims 1, 5, 6, 9, 10, and 12-14 based on Martin, *et al.*, and allowance of those claims, is requested.

Rejection under 35 U.S.C. § 103(a)

Claim 11 was rejected as obvious over Barkhurst. Claim 11 depends indirectly from claim 6, which, as amended, requires the drape bar to be supported such that the fabric-receiving portion of the drape bar is at an angle from the horizontal. That feature is not even remotely suggested by Barkhurst. On the contrary, Barkhurst uses sockets 3 in which rod 4 is mounted. Rod 4 is free to turn within sockets 3 as the shade B is moved up and down, so that it will remain horizontal. See *col.* 2, *ll.* 52-88. Barkhurst suggests nothing more than a horizontal rod that remains horizontal as the shade is moved. Regardless of what material the drape bar of the present invention may be made, Barkhurst still fails to suggest a drape bar supported such that the fabric-receiving portion

of the drape bar is at an angle from the horizontal. Accordingly, Barkhurst does not suggest or make obvious the invention recited in claim 11.

The rejection of claim 11 as obvious over Barkhurst is without support. Withdrawal of that rejection and allowance of claim 11 is requested.

Rejection under either 35 U.S.C. § 102(b) or 103(a)

Claims 15-17 were rejected as anticipated by or in the alternative obvious over Barkhurst. Barkhurst neither teaches nor suggests the recited relationship (*i.e.*, the equation of claim 15). For example, if $\theta = 0$ (as must be the case for Barkhurst, since the rods 4, 4a lie entirely in the horizontal plane), then the recited equation can never be satisfied, *i.e.*,

$$(A + D)^2 \neq 0.$$

In other words, the distance between the shade roller and the hem bar is not constant along the width of the shade. Further, Barkhurst does not teach a horizontal distance D between the roller tube and points at which the edge of the shade fabric meets the rods 4, 4a. Rather, the curved rods 4, 4a are shown immediately beneath the roller tube A in Figs. 3 and 4 of Barkhurst.

Applicant has attached to this response figures {a}, {b}, and {c}, which illustrate the failure of Barkhurst to satisfy the recited relationship of claim 15. Fig. {a} is a top view of the roller shade assembly of Barkhurst (equivalent to Fig. 3 of Barkhurst). Fig. {b} is a side view of the roller assembly of Barkhurst, demonstrating the hanging fabric at various cross-sections A, B, C. Fig. {c} is a side view of the roller assembly showing wrinkling in the hanging shade fabric.

Since, by definition, the length of the shade fabric is constant across the width of the shade roller, the length of the shade fabric at all locations A, B, and C (see Fig. {b}) must be equal, *i.e.*,

$$B = A_1 + A_2 = C_1 + C_2.$$

For the vertical distance between the roller tube and the hem bar to be constant along the width of the shade roller (*i.e.*, the hem bar is horizontal), the vertical distance from the roller tube to the hem bar must be equal at A, B, and C, *i.e.*,

$$B = A_1\cos(\Phi_1) + A_2 = C_1\cos(\Phi_2) + C_2.$$

However, this requires

$$A_1 = A_1\cos(\Phi_1) \text{ and } C_1 = C_1\cos(\Phi_2),$$

which means that

$$\Phi_1 = 0^\circ \text{ and } \Phi_2 = 0^\circ.$$

Accordingly, for Barkhurst, the hem bar will be horizontal, and the shade fabric will be wrinkle-free, only if the angles Φ_1 and Φ_2 are equal to zero. However, in Barkhurst, they can equal zero only when the shade fabric hangs straight down, which is exactly the opposite of what Barkhurst's invention is intended to do. Thus, it is not possible for the distance between the roller tube and the hem bar to be constant along the width of the shade roller and the shade fabric to be smooth and free of wrinkles. Because the hem bar will attempt to maintain all points along the bottom of the shade fabric at the same level, the shade fabric will bunch and wrinkle as shown in Fig. {c}. A key aspect of the present invention is to provide a roller shade assembly for a curved or non-planar window that provides a smooth, even, wrinkle-free surface of the hanging shade fabric.

It can be seen that Barkhurst cannot suggest, let alone disclose, the features and benefits of the claimed invention. Rather, the Barkhurst fixture works in a manner completely different from, and yields results different from, the claimed invention. Accordingly, claims 15-17 are neither anticipated by nor in the alternative obvious over Barkhurst. Applicant requests that the rejection of claims 15-17 under either 35 U.S.C. § 102(b) or 103(a) be withdrawn and claims 15-17 allowed.

New claims 18 and 19

Claims 18 and 19 are newly added by the foregoing amendment. Claim 18 recites an elongated bar in the form of a compound curve (see, for example, Figure 11 of the specification) and that, like claims 1 and 6, is supported to orient the curved portion at an

angle from the horizontal. Neither of those features is disclosed or even suggested in the references of record, and accordingly claim 18 is patentable over them. Claim 19 combines the features of claims 1 and 5, and is patentable for the reasons set forth above with respect to claim 1.

CONCLUSION

Claims 1-3 and 5-19, all of the claims pending in this application, are novel and non-obvious over the references of record for the reasons set forth above.

Withdrawal of all rejections and an early Notice of Allowance are earnestly solicited.

Respectfully submitted,

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